Title (en)

OPTICAL CHARACTERISTIC MEASURING DEVICE, OPTICAL CHARACTERISTIC MEASURING METHOD, EXPOSURE DEVICE, EXPOSURE METHOD, AND DEVICE MANUFACTURING METHOD

Title (de)

EINRICHTUNG UND VERFAHREN ZUR MESSUNG EINER OPTISCHEN KENNGRÖSSE, BELICHTUNGSEINRICHTUNG, BELICHTUNGS-VERFAHREN UND BAUELEMENTEHERSTELLUNGSVERFAHREN

Title (fr)

DISPOSITIF DE MESURE DES CARACTERISTIQUES OPTIQUES, METHODE DE MESURE DES CARACTERISTIQUES OPTIQUES, DISPOSITIF D'EXPOSITION, METHODE D'EXPOSITION, ET UNE METHODE POUR FABRIQUER LE DISPOSITIF

Publication

EP 1796142 A4 20101006 (EN)

Application

EP 05770442 A 20050809

Priority

- JP 2005014585 W 20050809
- JP 2004232370 A 20040809

Abstract (en)

[origin: EP1796142A1] An optical property measurement apparatus (90) is equipped with an optical system unit (93) that selectively places an opening section (97) for passing illumination light, a microlens array (98) for measuring wavefront aberration, and a polarization detection system (99) for measuring a polarization state of the illumination light on an optical path of the illumination light. Accordingly an illumination shape and a size of an illumination optical system, wavefront aberration of a projection optical system and a polarization state of the illumination light can be measured together. Therefore, for example, even when exposure is performed with polarized illumination that is a type of modified illumination, highly-accurate exposure can be achieved by adjusting various optical systems based on the measurement results.

IPC 8 full level

H01L 21/027 (2006.01); **G01M 11/02** (2006.01); **G03F 7/20** (2006.01)

CPC (source: EP KR US)

G03F 7/70133 (2013.01 - EP KR US); **G03F 7/70141** (2013.01 - EP KR US); **G03F 7/70258** (2013.01 - EP KR US); **G03F 7/70566** (2013.01 - EP KR US); **G03F 7/706** (2013.01 - EP KR US); **G03F 7/7085** (2013.01 - EP KR US)

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1796142 A1 20070613; **EP 1796142 A4 20101006**; CN 100517569 C 20090722; CN 101002300 A 20070718; JP 5179754 B2 20130410; JP WO2006016584 A1 20080501; KR 101193830 B1 20121023; KR 20070041491 A 20070418; US 2008043236 A1 20080221; US 7667829 B2 20100223; WO 2006016584 A1 20060216

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EP 05770442 A 20050809; CN 200580026943 A 20050809; JP 2005014585 W 20050809; JP 2006531656 A 20050809; KR 20077000053 A 20050809; US 65957105 A 20050809